

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF WISCONSIN

WISCONSIN ALUMNI RESEARCH
FOUNDATION,

Plaintiff,

v.

APPLE, INC.,

Defendant.

OPINION AND ORDER

14-cv-062-wmc

This case is set for a jury trial commencing October 5, 2015. Based on the parties' extensive briefing and oral argument at the final pretrial conference, the court issues the following opinion and order with respect to plaintiff's numerous motions *in limine*, including several motions to strike expert testimony.¹

OPINION

I. WARF's Motions *in Limine*

A. MIL 1: exclude evidence and argument describing WARF as a "patent troll" (dkt. #289)

WARF seeks an order "precluding Apple from presenting evidence or argument that WARF as a 'patent troll,' 'patent assertion entity,' 'non-practicing entity' or other similarly pejorative terms." (Pl.'s Mot. (dkt. #289) 1.) WARF contends that these terms are not relevant and are also unfairly prejudicial.

For its part, Apple does not oppose the motion to the extent it only seeks to exclude pejorative labels, but Apple contends that the motion goes too far by also seeking

¹ The court will issue a separate order on Apple's motions *in limine*.

to exclude any reference to WARF as a “non-practicing entity.” Apple argues that such evidence is relevant to damages, namely the *Georgia-Pacific* factor of the “commercial relationship between the parties,” a point WARF itself recognizes in its own motion. (Def.’s Opp’n (dkt. #397) 2; Pl.’s Mot. (dkt. #289) 2-3.) Moreover, Apple contends that the label “non-practicing entity” is descriptive and does not have the pejorative character of “patent troll” or similar language. The court agrees with Apple that the term “non-practicing entity” does not carry the negative weight of “patent troll” or similar terms.

Accordingly, this motion is GRANTED IN PART AND DENIED IN PART. Any reference to WARF as a “patent troll” or similar label is excluded, and any reference to WARF as a “non-practicing entity” or similar label is also excluded from the liability stage, but Apple may offer evidence of WARF’s status as a “non-practicing entity” and argue from that fact during the damages phase of trial.

B. MIL 2: exclude evidence and argument regarding Apple’s ’647 application and patent (dkt. #290)²

WARF seeks an order excluding evidence and argument regarding Apple’s ’647 patent on the basis that (1) it has no relevance to WARF’s claim of literal infringement; (2) its claimed relevance to a defense to WARF’s infringement claim under the doctrine of equivalents is untimely, having been presented for the first time in Dr. August’s stricken supplemental report; and (3) its claimed relevance to damages is also untimely because that claim was first presented in Davis’s now-withdrawn, supplemental report.

² At the MIL hearing, Apple represented that the ’647 patent had, in fact, just been issued.

In bringing this motion, WARF also represents that its own expert, Dr. Conte, will no longer rely on the existence of the '647 application in his infringement testimony, making any attempt by Apple to cross-examine him on sections of his report describing the '647 application no more than an end-run around the court's order striking Dr. August's untimely supplement.³

With respect to the '647 application's and patent relevance to infringement, Apple responds that (1) it timely disclosed the application's existence in interrogatory responses; and (2) Dr. August explained its prosecution history, including that the USPTO did not reject the patent because of the '752 patent, and described in his damages report how Apple's accused products practice at least one of the claims of the '647 application. As WARF anticipated, Apple also relies on the fact that WARF's own expert, Dr. Conte, relied upon the '647 application in his infringement report. From this, Apple argues that Dr. August should be permitted to testify about the '647 application and its prosecution history (including Apple's disclosure of the '752 patent in its application) and how Apple's products practice the '647 application. Further, Apple contends that it should be allowed to question Conte about his reliance on the '647 application in forming his opinions.

Apple further points out that evidence of separate patentability *is* relevant to the jury's determination of infringement by equivalency (even if, as WARF concedes, such evidence is not conclusive). *See, e.g., Siemens Med. Solutions USA, Inc. v. Saint-Gobain*

³ WARF moved to file a reply brief in support of this motion *in limine* (dkt. #448), which is GRANTED. The court has considered WARF's reply in ruling on the present motion.

Ceramics & Plastics, Inc., 637 F.3d 1269, 1280 (Fed. Cir. 2011) (“[W]here . . . the alleged equivalent is claimed in a separate patent, this fact, when weighed by the fact-finder together with all other relevant evidence, may make equivalency ‘considerably more difficult to make out’ by a preponderance of the evidence.”). As WARF frames it, however, the issue comes down to whether Apple timely disclosed such a theory.

The record reflects that the application itself was disclosed, and Dr. August described a bit of the prosecution history in his non-infringement report. Still, WARF contends that August essentially found it irrelevant in that report, relying on the following passage:

Although the ’647 [application] resulted from Apple’s work developing the LSD Predictor for the A7 chip, the entire description in those applications does not correspond exactly with the final commercial implementation of the LSD Predictor in the Apple Accused Chips. Apple’s source code, not the description in Apple’s patent applications, determines how Apple’s commercial products work.

(Pl.’s Mot. (dkt. #290) 6 (quoting August Non-Infringement Rept. (dkt. #103) ¶ 193).) Apple responds that August’s liability report did not consider that Apple’s products practice the claims in the ’647 application, but rather cites to August’s *damages* report. Indeed, as WARF points out, and Apple concedes, Apple attempted to fix this oversight in filing an untimely supplement, which the court previously struck. (8/20/14 Order (dkt. #225).) As such, Apple did not disclose timely an expert opinion that the ’647 application demonstrates separate patentability for purposes of defending against WARF’s infringement by the doctrine of equivalents claim. Accordingly, any use of this testimony for infringement purposes is properly excluded.

As this court previously pointed out, even though Dr. August cannot offer an opinion of separate patentability in defense of WARF's infringement claim under the doctrine of equivalents, Apple contends, and argued at the final pretrial conference, that he may still testify consistent with the opinions offered in his non-infringement report about the '647 patent application process as proof of separate patentability, and the jury may draw reasonable inferences from August's testimony to weigh whether the existence of the '647 patent application is relevant to WARF's claim of infringement under the doctrine of equivalents. In order to evaluate Apple's proposal, on or before September 29, 2015, Apple is directed to file a proffer of evidence of its defense to WARF's infringement under the doctrine of equivalents claim based on the '648 patent. WARF has until October 1, 2015, to file a response.

Next, Apple contends that the '647 application is relevant to its invalidity challenge. In particular, Apple seeks to cross-examine WARF's expert Trevor Mudge on his reliance on the '647 application and patent to support his validity opinion. For its part, WARF argues that Mudge's opinion "has nothing to do with the allowance of the current claims," and that he "will not be offering testimony on this application or its foreign counterparts." (Pl.'s Mot (dkt. #290) 7-8 & n.4.) This may be so, but Apple remains free to cross-examine Mudge on the opinions he presented in his report. Having disclosed those opinions, WARF cannot walk them back now that the '647 application has been approved.

As for damages, WARF argues that Apple's only disclosure of a damages calculation premised on the '647 patent application was Julie Davis's untimely

supplement, which Apple has since withdrawn. (Pl.'s Mot. (dkt. #290) 9.) Not so, counters Apple, directing the court to: (1) Dr. August's opinions described above; (2) Dr. Lorin Hitt's reliance on Apple's patents that cover functionality used in the accused products to apportion damages; and (3) Julie Davis's own timely report, which in turn relies on the opinions of August and Hitt. (Def.'s Opp'n (dkt. #398) 10-11.) WARF argues in its reply that Hitt and Davis simply mention patents generally, without any specific reference to the '647 application. Still, there is no dispute that Dr. August specifically mentioned the '647 application in his damages report and described how Apple's products practice the invention disclosed in that application.

Finally, Apple argues that the '647 patent application is relevant to WARF's willful infringement claim. Given relatively recent developments in the law surrounding willful infringement claims, it is unclear what is left for the jury to decide as part of the subjective prong, other than knowledge. As such, the fact that Apple applied for a separate patent does not appear relevant to the jury's determination, but the court will reserve on this part of WARF's motion.

Accordingly, WARF's motion with respect to Apple's defense of a literal infringement claim is GRANTED as unopposed, but DENIED with respect to Apple's defense of WARF's damages case and its invalidity challenge, subject to the limitations described above. The motion is RESERVED as to any relevance with respect to Apple's defense of WARF's infringement under the doctrine of equivalents claim and the subjective prong of the willful infringement claim.

C. MIL 3: exclude evidence and argument regarding Apple's patent portfolio (dkt. #291)

In this motion, WARF takes an even broader approach than in its second motion *in limine* with respect to Apple's "patent portfolio," seeking an order "barring Apple from presenting evidence or argument regarding its patent portfolio, including numerous patents identified in expert reports, because they are not relevant." (Pl.'s Mot. (dkt. #291) 1.) WARF also argues that this evidence should be excluded under Rule 403. Specifically, WARF seeks to exclude this testimony in Apple's rebuttal expert reports on damages by August, Hitt and Davis. Dr. August identified 71 Apple patents that relate to processors, but only identified five that he contends are practiced in some fashion by the accused processors. Dr. Hitt and Davis in turn rely on August's opinions in their respective reports.

WARF criticizes Dr. August's analysis, but the criticism is no more than possible fodder for cross-examination. As a technical witness, Dr. August described how the accused products practice Apple's patents. Apple's other experts relied on those opinions in apportioning damages between the alleged infringing features and other features. The court sees no obvious flaw in this approach.

Apple also opposes WARF's motion by arguing that Apple's patent portfolio is: (1) a "relevant background fact" for explaining who Apple is, illustrating how it would have approached the hypothetical negotiation, and introducing Apple's engineers who may testify at the trial; and (2) relevant to calculating damages, in particular, "apportioning the value of Apple's accused products between the one feature that allegedly infringes the '752 patent and the many other features in Apple's products."

The court agrees that the patent portfolio may be relevant to the damages phase of trial. Other than individual Apple witnesses testifying generally to his or her respective background and responsibilities in obtaining or managing patents, Apple's patent portfolio has no relevance in the liability phase. Accordingly, the motion is GRANTED IN PART AND DENIED IN PART as described above.

D. MIL 4: preclude Apple from putting at issue viable future alternatives (dkt. #292)

WARF seeks an order precluding Apple from putting at issue its ability to implement a viable future alternative to the load-store dependency ("LSD") predictor. As context, Magistrate Judge Crocker previously granted Apple's motion for a "protective order blocking any discovery into its development work after the design of the [LSD] predictor and the release of the predictor in the A7, A8 and A8x processors." (10/31/14 Hr'g Tr. (dkt. #72) 28, 31.) Despite this motion and a subsequent Rule 30(b)(6) deposition in which the witness refused to answer questions about design around options because of the protective order (Pl.'s Mot. (dkt. #292) 1), WARF represents that Apple intends to offer expert testimony that "Apple could have implemented one of these alternative designs with approximately six months of design works." (*Id.* at 2.) WARF contends that this testimony is unfair and was precluded by Judge Crocker in the hearing granting Apple's motion for a protective order. (*Id.* at 3 ("If the Court does not allow discovery on a particular product or particular line of questioning or interrogatories or requests for production of documents, that's a two-way street. Nobody uses it. So you don't have to worry about being sandbagged." (quoting 10/31/14 Hr'g Tr. (dkt. #72)

24)).) *See also Harris v. City of Chi.*, 266 F.3d 750, 754 (7th Cir. 2011) (“[T]he district court should have either prevented Ramos from testifying to matters about which he had previously refused to testify or allowed Harris to impeach him with his prior silence on those matters.”).

In response, Apple states that it agrees “those future products have no place in this case,” and indeed, has moved *in limine* to preclude WARF from offering any evidence or argument regarding Apple’s future products. (*See* Def.’s MIL 7 (dkt. #338) 23-24.) Still, Apple opposes WARF’s similar motion to the extent that it would exclude evidence or argument “concerning the non-infringing alternatives that Apple could have implemented *for the accused products*,” in other words, “what alternative Apple had available for the accused products in the *past*, at the time of the hypothetical negotiation.” (Def.’s Opp’n (dkt. #400) 2 (emphasis in the original).) Apple represents that WARF has obtained full discovery on this issue.

Accordingly, the motion is GRANTED as unopposed, but nothing about this ruling precludes Apple from presenting non-infringing alternatives available to it at the time of the hypothetical negotiation, so long as Apple responded to discovery requests as to those non-infringing alternatives.

E. MIL 5: preclude Apple from presenting evidence of the existence of “predictors” (dkt. #293)

In this motion, WARF seeks an order precluding Apple’s technical expert, Dr. Colwell, from testifying about “predictor” designs developed by third parties after the ’752 patent. WARF contends that Dr. Colwell cannot lay a foundation permitting the

jury to find that these designs are non-infringing and commercially-viable alternatives. In response, Apple represents that Dr. Colwell will not testify that these predictor designs are non-infringing alternatives, rather he identifies these designs in support of his opinion of the limited scope and contribution of the '752 patent, which is one of the *Georgia-Pacific* factors. In light of Apple's response, this motion is GRANTED as unopposed as to any testimony concerning the predictor designs as non-infringing alternatives, but DENIED in all other respects. Of course, the court will instruct the jury to disregard Dr. Colwell's opinions premised on the availability of these alternatives unless otherwise proven.

F. MIL 6: exclude evidence and argument regarding the entire market value rule (dkt. #294)

WARF seeks an order excluding any reference to the entire market value rule, arguing that such reference is not applicable here since both parties agree that damages must be calculated based on the value of the infringing feature rather than calculated based on the full value of the product, whether measured in terms of revenues, profits or per unit price. *See Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1336 (Fed. Cir. 2009) ("The entire market value rule allows for the recovery of damages based on the value of an entire apparatus containing several features, when the feature patented constitutes the basis for customer demand.") (citations omitted). WARF is apparently concerned that Apple intends to raise the entire market value rule at trial in an effort to argue that WARF's damages should be further discounted.

At first glance, WARF's position seems odd. Apple's interests in limiting damages would appear contrary to its raising the entire market value rule, which after would allow WARF to seek damages based on the full value of the accused products. *See Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011) (finding error where district court allowed plaintiff to compare royalty rate to Microsoft's total revenues for the accused products rather than the revenues apportioned to the specific infringing feature at issue); *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67-68 (Fed. Cir. 2012) (explaining that the risk of introducing too high of a royalty base through the entire market value rule is that the jury will overcompensate).

In response, Apple acknowledges that this case fits within the general requirement that damages must be apportioned to the infringing feature of the accused product, but still argues that references to the entire market value rule are necessary to "set the stage for the jury, and provide the necessary context to allow the jury to understand why both sides are engaging in an apportionment analysis." (Def.'s Opp'n (dkt. #402) 2.) However, the entire market value rule is an *exception* to the general rule that the royalty base must be apportioned to take into account the particular patented feature at issue. Because the parties' agree that the entire market value rule does not apply in this case, there is no reason why the jury need be introduced to it.

Presumably, Apple opposes the motion because it seeks to argue that WARF cannot recover based on the entire market value or even submarket to the extent not driven by demand for the patented feature. Factor 13 of the *Georgia-Pacific* factors will provide an opening for Apple to present evidence and make this argument to the jury,

without needing to “set the stage” by introducing the entire market value rule. *See Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970) (the portion of the infringer’s profit that “should be credited to the invention as distinguished from non-patented elements”).

More to the point, the court *will* instruct the jury as to the law involved in calculating a reasonable royalty, including apportioning the value of the patented features from the non-patented features. That instruction will provide proper context for the parties’ respective apportionment analysis. Apple may argue that the infringing feature is a very small component of the full value of the product, just as WARF may present the opposite position. All of this is proper fodder for the jury to consider. But *neither* side will be introducing irrelevant legal concepts to this jury. Accordingly, WARF’s motion is GRANTED as to any evidence or argument about the “entire market value rule,” but DENIED as to any evidence or argument concerning the parties’ respective apportionment analysis.

G. MIL 7: exclude WARF’s and Intel’s damages claims in the *Intel* litigation (dkt. #295)

WARF moves to preclude the parties from offering evidence or argument regarding the damages contentions, including the amount sought in expert reports, that WARF and Intel made in the *Intel* litigation. (The *Intel* case settled before trial with Intel paying WARF \$110 million lump sum for a license to the ’752 patent, and WARF concedes that the fact and amount of settlement will come into evidence. (Pl.’s Mot. (dkt. #295) 6.)) WARF contends that “[h]ow much WARF may have asked the jury [to

award] six years ago . . . for Intel’s infringement in a case that never went to trial, and how Intel may have responded to WARF’s damages claim at that time, are not probative of the issues here, because of material changes in the law on which those claims were based.” (Pl.’s Mot. (dkt. #295) 3.) WARF further explains that it sought a damages award based on the entire market value rule, but is not seeking such an award here because “the law [now] prohibits a royalty based on total revenue from sales of the accused products unless the requirements of the entire market value rule are satisfied.” (*Id.* at 4-5 (discussing *Uniloc USA v. Microsoft Corp.*, 632 F.3d 1291 (Fed. Cir. 2011); *VirnetX, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308 (Fed. Cir. 2014); *LaserDynamics, Inc. v. Quanta Computer, Inc.*, 694 F.3d 51, 67 (Fed. Cir. 2012)).)

In response, Apple argues that “WARF’s damages demand in the *Intel* litigation is relevant information for the jury to understand the context of the Intel license and why Intel was willing to make a \$110 million payment.” (Def.’s Opp’n (dkt. #304) 2.) (Apple represents that WARF sought [REDACTED] in damages.) While the court credits Apple’s concern that, viewed in isolation, the jury may view the \$110 million payment as reflective of how Intel valued the ’752 patent, without appreciating the risk against which Intel was managing, the many factors that both sides considered when arriving at that dollar amount can be conveyed without conveying the amount of any individual offer or counteroffer leading up to the negotiated lump sum settlement.⁴ Indeed, either side’s

⁴ The court has not been asked by either side to exclude this lump sum payment from consideration by the jury in arriving at an appropriate royalty amount -- which is perhaps understandable since there is no other license of the patent in issue. So, the court will not do so, but the consequence is that the court can only attempt to manage the arguments of both sides as to its significance here.

negotiating position when viewed in isolation would be confusing to the jury and is properly excluded under Rule 403. As such, the motion is GRANTED.

H. MIL 8: exclude deposition testimony of Intel employee Papworth and deposition exhibits 5 and 6 (dkt. #330)

WARF seeks an order excluding deposition testimony and deposition exhibits on which Apple's experts rely in converting the \$110 million Intel settlement payment into a per unit royalty rate. As context, Apple served a third-party subpoena on Intel, seeking documents and testimony regarding the number of processors containing the infringing feature Intel sold, among other requests. In response to the subpoena, Intel produced its employee David Papworth for a deposition, in which he testified that Intel [REDACTED]

[REDACTED] of such processors from [REDACTED]. Deposition exhibits 5 and 6 are spreadsheets which Papworth prepared to determine this amount. WARF now seeks to exclude: (1) Papworth's testimony on the basis that he lacked personal knowledge as required under Rule 602; and (2) the two exhibits as hearsay. WARF asserts several bases in support of its motions.

First, WARF argues that Papworth lacked personal knowledge about the contents or creation of Exhibits 5 and 6, specifically directing the court to deposition testimony in which he testified that he did not know the identity of the person who generated the exhibits. (Pl.'s Mot. (dkt. #330) 5-6 (quoting Papworth Dep. (dkt. #231) 40-42).) As

⁵ Neither side explains why sales during this period of time, rather than the period of alleged infringement leading up to the lump sum is more probative, but WARF does not seek to exclude Papworth's testimony or the exhibits on that basis.

Apple points out, however, Papworth testified that the spreadsheets were collected from Intel's corporate database [REDACTED]

[REDACTED] (Def.'s Opp'n (dkt. #405) 6-7 (quoting Papworth Dep. (dkt. #231) 75-77).) Papworth also testified that, he spoke over the phone for about an hour with the individuals who generated or collected the data. (*Id.* at 7 (quoting Papworth Dep. (dkt. #231) 45-46).) Based on this, Papworth testified that he is familiar with "Intel's approximate sales figures and what the processors are and the time frames they are sold in," and that the validity and authenticity of Exhibits 5 and 6 were supported by his "personal knowledge." (*Id.* at 8-9 (quoting Papworth Dep. (dkt. #231) 47-48).) This is more than sufficient to satisfy Rule 602.

Even if his testimony were not sufficient to satisfy the personal knowledge requirement, as Apple points out, Papworth was designated as Intel's 30(b)(6) representative and, in that capacity, can testify regarding matters of corporate knowledge. *See PPM Fin. v. Norandal USA, Inc.*, 392 F.3d 889, 894-95 (7th Cir. 2004) ("Krupinski was designated as a witness under Fed. R. Civ. P. 30(b)(6), which authorized him to testify not only to matters within his personal knowledge but also to matters known or reasonably available to the organization. Thus, Krupinski was free to testify to matters outside his personal knowledge as long as they were within the corporate rubric") (internal citation and quotation marks omitted).

Second, WARF argues that Papworth lacked personal knowledge as to which Intel processors practiced the '752 patent, specifically criticizing Papworth's approach of including any processors [REDACTED]

[REDACTED] arguing that at least after 2009, it is not clear what [REDACTED] [REDACTED] technology Intel uses in its processors and whether that technology is covered by the '752 patent. (Pl.'s Mot. (dkt. #330) 9-10.) In response, Apple argues that Intel's license from WARF covers [REDACTED] [REDACTED] and therefore the sales figures accurately reflect the number of units covered by the license. (Def.'s Opp'n (dkt. #405) 9-10.) Moreover, Apple directs the court to Papworth's testimony in which he explained that [REDACTED] [REDACTED] which is the key feature WARF alleged infringed the '752 patent. (*Id.* at 10-11 (quoting Papworth Dep. (dkt. #231) 73, 118-20).) Based on this, the court is satisfied that Papworth's testimony meets the evidentiary requirements.

Finally, WARF contends that the exhibits constitute hearsay, specifically arguing that the business records exception, Fed. R. Civ. P. 803(6), does not apply because the exhibits were created for purposes of litigation and are therefore not business records. (Pl.'s Mot. (dkt. #330) 12.) The fact that the spreadsheets were created for litigation does not foreclose a finding that they fall within the business record exception. *See United States v. Fuji*, 301 F.3d 535, 539 (7th Cir. 2002) ("Computer data compiled and presented in computer printouts prepared specifically for trial is admissible under Rule 803(6) even though the printouts themselves are not kept in the ordinary course of business."). Papworth established through his testimony that the data in the exhibits was from Intel's corporate database, maintained by individuals with knowledge of sales data,

as part of Intel's normal course of business, and that the spreadsheets are accurate and reliable. (Def.'s Opp'n (dkt. #405) 15-16 (quoting Papworth Depo. (dkt. #231) 46-47, 75-77).) Moreover, regardless of whether the exhibits themselves may be admitted into evidence, Apple's experts are of course free to rely on them. *See, e.g., Tilstra v. BouMatic LLC*, 791 F.3d 749, 753 (7th Cir. 2015) (“[A]n expert witness is not required to verify all the facts on which he relies; he can rely on hearsay (in this case, what the accountants stated in the financial statements) provided that such reliance is an accepted practice in his profession, as it is.” (citing Fed. R. Evid. 703)). If WARF truly believed the summaries were inaccurate, it also had ample time to take its own discovery regarding the underlying data and methodology of its compilations.

WARF, of course, is free to challenge Apple's expert's use of Intel's sales data, including arguing the sales data reflects processor units that should not be included, but the court finds no basis to exclude Papworth's testimony, the exhibits, or Apple's experts reliance on both. As such, WARF's motion is DENIED.

I. MIL 9: exclude evidence and argument regarding royalty stacking (dkt. #332)

WARF seeks an order precluding Apple's witnesses from testifying or suggesting that there are a large number of patents that cover the accused products as a basis for the jury to discount the royalty rate in this case. In particular, WARF argues that: (1) Apple has not established the factual predicates for a “royalty stacking” argument, including the number of patents actually in play; (2) the parties agree that the appropriate royalty base is the system on a chip (“SoC”) component, not the entire phone or tablet; and (3) the

royalty stacking theory only applies to certain technical standards (or RAND) cases not applicable here.

In response, Apple contends that the fact that hundreds of thousands of patents relate to smartphones and tablets is relevant to its mindset at the hypothetical negotiation, and directly relevant to *Georgia-Pacific* Factor 15, the summary factor requiring the jury to consider “the amount which a prudent licensee would have been willing to pay as a royalty and yet be able to make a reasonable profit.” *Georgia-Pacific Corp.*, 318 F. Supp. at 1120. Apple directs the court to deposition testimony from Apple officials describing Apple’s practice when negotiating licenses of considering the number of patents in the relevant technical space, and specifically explaining Apple’s practice of not paying a “disproportionately high” royalty for any one patent in a very crowded field, because it “would make it prohibitively expensive to create an iPhone or to sell an iPhone.” (Def.’s Opp’n (dkt. #406) 3-4 (quoting Jeffrey Risher Dep. (dkt. #102) 98).)

In support of its motion, WARF cites to *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201 (Fed. Cir. 2014). In *Ericsson*, the Federal Circuit held that the district court did not err by refusing to instruct the jury on royalty stacking where the defendant “failed to come forward with any evidence of other licenses it has taken on Wi-Fi essential patents or royalty demands on its Wi-Fi enabled products.” *Id.* at 1234. While this decision is helpful in determining whether a specific instruction on royalty stacking should be provided, Apple does not seek such an instruction. Rather, Apple argues that this *information* is useful for the jury to understand Apple’s position going into the

hypothetical negotiation. WARF has failed to come forward with a valid basis for excluding this testimony. As such, this motion is DENIED.

J. MIL 10: exclude evidence and argument regarding Lipasti's email to Dietrich (dkt. #333)

WARF moves to preclude Apple from introducing evidence and argument regarding a May 7, 2008, email from a UW researcher, Dr. Mikko Lipasti, to Deanna Dietrich, the Associate Dean of Research and Policy Administration for UW. (Abernethy Decl., Ex. 22 (dkt. #325-23).) In the email, titled "FYI: Intel funding cut off," Lipasti notifies Dietrich that Intel cut his funding pending resolution of WARF's 2008 lawsuit for infringement of the '752 patent.

Lipasti goes on to express his opinion that the invention claimed by the '752 patent was obvious and that one of the named inventors may have stolen ideas for the patent from one of Lipasti's presentations. The email states in pertinent part:

I took some time to look over the patent, and it is quite embarrassing in terms of the claims. . . . [M]y thesis contains practically every claim in the patent in one form or another . . . so I independently invented these ideas in the same time frame. . . . The kicker is that I never thought of these as substantial contributions, but just as the "obvious to anyone skilled in the art" engineering solutions to very simple problems. I also visited Wisconsin on Nov. 25, 1996, and gave a seminar talk where I touched on many of these ideas. Sohi [one of the named inventors of the '752 patent] was in the seminar audience that day.

Like most societal constructs, the patent system only works if all participants maintain a certain level of integrity, in terms of filtering out demonstrable obvious ideas It's pretty clear to me that this case falls below that threshold. I am sure Sohi has a different opinion; he usually does. FYI, Intel is

aware of my thesis work. I imagine it is likely to come up at the trial.

Id.

Apple intends to introduce the email during the liability and damages phases of trial as evidence of obviousness and “criticism of the claimed invention.” (Def’s Opp’n (dkt. #407) 1.) For example, Apple’s expert Robert Colwell cites Lipasti’s email as evidence that the ’752 patent “does not introduce or contribute any fundamental improvements in the field; it simply takes known elements from the prior art and combines them to describe and claim a circuit that implements one particular prediction technique for performing data speculation in an out-of-order processor.” (Colwell Damages Rept. (dkt. #188) ¶¶ 120, 141.)

WARF argues that the email should be excluded because it: (1) is irrelevant to the obviousness of the ’752 patent; (2) would waste time, confuse the jury, and unfairly prejudice WARF; and (3) is inadmissible hearsay. WARF points out that Lipasti conceded during a 2008 deposition that some of the statements in the email were inaccurate and that he had written the email because he was angry about losing \$35,000 in funding as a result of the Intel litigation. (Lipasti Dep. (dkt. #228) 36.) He testified that his “judgment was clouded by [his] emotions,” and that the email “claimed more than [he] should have claimed in terms of [his] knowledge of the patent.” (*Id.* at 45-51.) Additionally, Lipasti admitted that his thesis did not actually contain all the claims of the patent and that he had only looked at the patent “briefly” before writing the email. (*Id.* at 45-54.)

The court agrees with WARF that the email should be excluded, both because it is hearsay and because any marginal relevance it has is outweighed by the risk of confusion, prejudice, and inefficiency. The email is hearsay because Apple intends to use it for the truth of the matter asserted, namely, that the patented invention is “obvious” and insubstantial. Apple’s explanation that it intends to use the email only to show contemporary “criticism” of the patent is circular and not persuasive. Apple wants to use Lipasti’s “criticism” of the patented invention as “obvious” to prove that the invention is invalid because it was “obvious.” Such a use violates the rules against hearsay.

If anything, Apple hopes to imply (if not argue) that this email is not hearsay at all, because it is essentially an admission against interest by an agent of WARF or at least the UW. Instead, it is the unvetted, private musing of a single researcher being offered for the truth of the matter asserted.

Nor has Apple pointed to a hearsay exception that allows its admission. Certainly, experts frequently rely on hearsay to form opinions, as permitted by Rule 703. However, that Rule permits the use of hearsay only if experts in the field “would reasonable rely on those kinds of facts or data in forming an opinion on the subject.” Fed. R. Evid. 703. Here, Apple does not even attempt to argue that an expert in the field would base an opinion about obviousness on a hastily written email sent by an angry colleague who later admits that he had only “briefly” reviewed the patent and that statements in the email were not “accurate” or even truthful.

Apple’s arguments about relevance are also unpersuasive. Apple argues that the reaction of peers to a patented invention is relevant to an obviousness analysis, but none

of the cases Apple cites involve conclusory statements similar to those in Lipasti's email. Lipasti's email does not discuss any of the specific claims of the patent at all; nor does it explain why the invention would be obvious to a person of skill in the relevant field. Moreover, Lipasti stated several times during his deposition that he was not very familiar with the patent and had only reviewed it "briefly." Thus, Lipasti's evaluation of the patent has marginal, if any, evidentiary value.

Had Lipasti expressed such a contemporary opinion in academic literature, in a formal setting or even in a meaningful exchange of opinions by colleagues, perhaps the outcome would be different, but the court will not permit Apple to waste time introducing evidence that not only constitutes hearsay, but has little value, would likely confuse the jury, would require the use of trial time to place it in context, and require additional limiting instructions to combat potential, unfair prejudice to the significance of the '752 patent. Accordingly, this motion is GRANTED.

K. MIL 11: exclude evidence and argument regarding government funding for invention claimed in '752 patent and relating to named inventor's Canadian tax dispute (dkt. #342)

In this motion, WARF seeks to exclude evidence of: (1) government funding for the invention claimed in the '752 patent; and (2) named inventor Dr. Andreas Moshovos' agreements with WARF and correspondence relating to a Canadian tax dispute on his royalties from the '752 patent. (Pl.'s Mot. (dkt. #342).) WARF contends that this evidence is not relevant, and that even if relevant, it is unfairly prejudicial and likely to confuse the jury.

In response, Apple agrees that the facts that the United States provided funding for the '752 patent and that Moshovos had a tax dispute with the Canadian government as to the tax treatment of royalty payments is not relevant and it does not intend to introduce evidence of either. Instead, Apple contends that certain *statements* Moshovos made to the Canadian government in 2010 are relevant. In particular, Apple wishes to introduce Moshovos' statement that he "truly believed that the future financial exploitation of the ['752] Patent, or unauthorized use of the Technology by a third party, would be unlikely" and "verily believed that he had received consideration for his assignment of the Technology to WARF." (Def.'s Opp'n (dkt. #408) 2.) Indeed, Apple claims Moshovos' statements are inconsistent with his testimony about the breadth of his invention, its significance, and the ability to avoid infringement of the patent.

As Apple concedes, any reference to the patent being funded by the United States government is excluded as not relevant. Moshovos' statements to the Canadian government are also excluded from the liability phase of this trial. As for the damages phase of trial, Moshovos' testimony about the benefits of the patent is marginally relevant, at best, to determining a reasonable royalty rate. *See AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1338 (Fed. Cir. 2015) (discussing *Georgia-Pacific* factors nine and ten concerning the benefits of the patented invention). Moreover, although not so prejudicial or confusing so as to render them inadmissible under Rule 403, once introduced, trial time will need to be spent placing the statements in the context of a tax dispute. Rather than start down this road needlessly, therefore, these statements may only be used by Apple for *impeachment* purposes of contrary statements by Moshovos if

introduced by WARF. Accordingly, this motion is GRANTED IN PART AND DENIED IN PART as set forth above.

L. MIL 12: exclude evidence and argument regarding untimely and waived claims construction (dkt. #335)

In this motion, WARF seeks to preclude Apple from making “untimely and waived claim construction arguments” for the terms “table,” “prediction table,” and “synchronization table.” WARF argues that Apple waived its opportunity to make claim construction arguments regarding these terms both by (1) failing to seek construction of the terms at summary judgment; and (2) failing to present its arguments regarding these terms timely in its non-infringement contentions. Both arguments are somewhat problematic on this record, but are also rendered largely moot by the fact that Apple’s argument actually *misconstrues* the terms’ meaning, at least when read in context of the patent as a whole.

The procedures set forth in the court’s standard Preliminary Pretrial Conference Order (“PPCO”) governing this case set a deadline by which each party was to exchange claim terms “for which that party intends to request construction by the court *during summary judgment motions practice*, along with its proposed construction.” (Dkt. #24 at ¶ 4 (emphasis added).) The PPCO in place at the time does *not* say that a party would be barred from seeking construction of a claim term later because a claim construction was not requested at summary judgment, although this was the court’s intent.⁶ Apple has

⁶ The court’s standard PPCO governing claim construction has since been amended to state explicitly that “[a]ny term” not identified as requiring construction “[t]wenty-one (21) days

some room to argue that a later request for construction might have been timely, but this would only mean that *neither* Apple nor WARF waived the opportunity to seek construction of the terms “table,” “prediction table,” or “synchronization table” by failing to disclose those terms by the deadline set forth in the Preliminary Pretrial Conference Order.

Nor was Apple expressly barred from presenting arguments regarding the correct interpretation of these terms because of an alleged failure to disclose timely non-infringement theories. WARF contends that Apple did not disclose its non-infringement theory that the “synchronization table” and “prediction table” claimed in the patent must be separate and distinct structures until it filed Dr. August’s rebuttal report on infringement on March 12, 2015. (Dkt. #103.) In that report, Dr. August opines that the accused LSD Predictor contains only a single table, whereas the ’752 patent requires separate synchronization and prediction tables. (*Id.*) WARF calls August’s report an “eleventh hour” revelation, but fails to acknowledge that WARF had not disclosed its own, specific infringement theory that a single table in the LSD Predictor satisfied both the “prediction table” and “synchronization table” elements of the patent until February 2, 2015, when WARF served its infringement expert report. (Dkt. #105.) Having only recently disclosed its infringement theory, WARF’s criticism of Apple failing to provide a non-infringement defense to WARF’s theory before serving August’s rebuttal report in March rings hollow at best.

before the dispositive motion deadline . . . will be given its plain meaning on summary judgment *and at trial.*” (Emphasis added.)

Regardless of which side is most at fault, there remains a dispute regarding the scope of the patent claims that must be resolved before a lay jury can decide infringement at trial. Indeed, both parties have provided several pages of argument to support their respective proposed constructions of “prediction table” and “synchronization table,” likely anticipating that the court will address the merits of their respective, opposing claim construction and, in any event, underscoring that it must do so. *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362-63 (Fed. Cir. 2008) (“When the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.”) (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff’d* 517 U.S. 370 (1996) (purpose of claim construction is to “determin[e] the meaning and scope of the patent claims asserted to be infringed”)). This is true even if one or both of the parties insist, as in this case, that the claim terms should be given their “plain” or “ordinary” meanings. *O2 Micro Int’l Ltd.*, 521 F.3d at 1361-62 (“plain meaning” construction not useful if “reliance on a term’s ‘ordinary’ meaning does not resolve the parties’ dispute”).

Turning then to the parties’ competing claim constructions, the question is whether the claimed “prediction table” and “synchronization table” must be located in separate structures that do not share data or have overlapping or shared circuitry. As already mentioned, WARF contends that the two tables may be found in a single structure, and thus can share data and circuitry. In contrast, Apple contends that the “prediction table” and “synchronization table” must be found in separate and distinct structures. After reviewing the claim language, specification, and applicable law, the

court agrees with WARF: the “prediction table” and “synchronization table” can be located in the same “structure,” including in a single table, and can share data and circuitry.

The court looks first to the language of the claims themselves. The terms in question are found in claims 3 and 5 of the ’752 patent:

Claim 3:

3. The data speculation decision circuit of claim 2 wherein the *instruction synchronization circuit* includes a *prediction table* listing certain data consuming instructions and certain data producing instructions each associated with a prediction and wherein the instruction synchronization circuit delays the particular data consuming instruction only:

(i) when the prediction associated with the data consuming instruction is within a predetermined range; and

(ii) when the particular data consuming instruction is in the *prediction table*.

Claim 5:

5. The data speculation decision circuit of claim 2 wherein the *instruction synchronization circuit* includes a *synchronization table* associating the certain data consuming instructions and the certain data producing instructions each with a flag value indicating whether the respective certain data producing instruction has been executed and wherein the instruction synchronization circuit delays the particular data consuming instruction only:

i) when the prediction associated with the data consuming instruction is within the predetermined range; and

ii) when the particular data consuming instruction is in the *prediction table*; and

iii) when the flag indicates the particular data producing instruction has not been executed.

’752 pat. cls. 3, 5 (dkt. #128-1).

Apple argues that since the claim language describes a “prediction table” and a “synchronization table” as distinct claim elements, they must be separate tables located in separate structures. However, the claims make no mention of structural separation of these two tables. To the contrary, the only language relevant to the location of the tables describes both tables as located in the “instruction synchronization circuit.” The remainder of claim language relating to the two tables describes only their composition and functions.

Apple’s construction also finds no support in the specification. While Apple cites language in the specification confirming the distinct *functions* of the two table types, and argues repeatedly that the “prediction table” and “synchronization table” perform separate functions and operate in different ways -- the prediction table determines *whether* load instructions may execute speculatively (’752 pat., 4:38-46), whereas the synchronization table determines *when* load instructions may execute after they have been prevented from speculating (*id.* at 4:54-65) -- Apple merely argues that the “prediction table” and “synchronization table” must be considered as separate and distinct “components” of the patented invention. But this is no more than a straw-man. WARF does not dispute that the “prediction” and “synchronization” tables are separate *components* of the invention or that the tables perform distinct *functions*. The question for claim construction is not whether the two types of tables perform distinct functions, but whether the claims require that the tables be *located* in separate structures. Apple’s citations to the specification do not support such a limitation.

Apple's reliance on the figures contained in the specification is similarly unhelpful to its construction. As an initial matter, the figures are conceptual diagrams and do not purport to be design schematics illustrating a physical layout. Even if the figures were describing an embodiment that had tables in separate structures, they would not justify importing such a limitation to the claims. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (limiting a claim to one disclosed embodiment violates basic principles of claim construction).

Apple's final argument fails for the same reason: Apple contends that synchronization tables and prediction tables must be separate to allow for the possibility, mentioned in the specification, that synchronization table entries "may be more numerous than the prediction table entries." '752 pat., 5:19-24. (Def.'s Opp'n (dkt. #409) 16.) Again, the specification makes clear that this is one embodiment, not a description that limits the scope of the claims. *See Phillips*, 415 F.3d at 1323.

The Federal Circuit considered and rejected arguments similar to Apple's in *Linear Technology Corp. v. ITC*, 566 F.3d 1049 (Fed. Cir. 2009). One of the claims at issue in *Linear* was a circuit for controlling a switching voltage regulator (to improve battery efficiency and life), which stated that the circuit "compris[ed]: a first circuit for monitoring the output . . .; a second circuit for generating a first control signal . . .; and a third circuit for monitoring the current" *Id.* at 1053. The Federal Circuit nevertheless determined that the terms "second circuit" and "third circuit"

[were to be construed] broadly to not require entirely separate and distinct circuits. Indeed, there is nothing in the claim language or specification that *supports narrowly construing the terms to require a specific structural*

requirement or entirely distinct “second” and “third” circuits. Rather, the “second” and “third” circuits must only perform their stated functions. . . . In fact, the . . . patent’s specification expressly discloses that the “second circuit” and “third circuit” can share common components.

Id. at 1055 (emphasis added) (citing *Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004) (“Absent a clear disavowal or contrary definition in the specification or the prosecution history, the patentee is entitled to the full scope of its claim language.”)).

While the ’752 patent is certainly broad enough to cover a structure in which the “prediction table” resides in a location separate from the “synchronization table,” nothing in the patent supports construing it so narrowly as to preclude a single table performing the separate and distinct functions of both a “prediction table” and a “synchronization table.” As in *Linear*, the claim language and specification only require that the tables “perform their stated functions.” *Id.* at 1055.

In contrast, the cases on which Apple relies are readily distinguishable. *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249 (Fed. Cir. 2010), involved a patent for a safety needle designed to prevent accidents. The relevant claim listed four elements: a needle, a guard that rides on the needle, a hinged arm that attached to the needle, and a spring means “connected to” the hinged arm. The court concluded that the claim language did not “suggest that the hinged arm and the spring means [could] be the same structure, and further, that “[t]he specification . . . confirm[ed] that the spring means [was] a separate element from the hinged arm” and that the claims would be rendered “nonsensical” and invalid if the “spring means” and “hinged arm” were the same

structure. *Id.* at 1254. Thus, the court construed the terms “hinged arm” and “spring means” to require separate structures. *Id.* Here, in contrast, neither the claim language nor the specification require that the prediction and synchronization tables be in separate structures. Moreover, Apple has not argued that the claims would be rendered “nonsensical” or invalid if they are not so limited.⁷

Apple also relies on *Engel Industries, Inc. v. Lockformer Co.*, 96 F.3d 1398 (Fed. Cir. 1996), but that case, too, is inapposite. *Engel Industries* involved construction of apparatus claims for connecting ends of sheet metal duct sections. The patent claims referred to a “return portion” and a “second portion” of a duct, which the Federal Circuit construed to be separate and distinct structures based on distinct descriptions for each. For example, the patent specified that the “second portion” was bent “rearwardly” and that a “return portion” was “also provided.” *Id.* at 1405. There was also substantial intrinsic evidence supporting a construction of separate and distinct elements. *Id.* Further, the return portion was specifically relied upon to distinguish the claimed invention over prior art during prosecution. *Id.* In contrast, Apple is attempting to read in a limitation neither in the specification nor in the claims. Finally, during the course of the patent’s prosecution, WARF never specifically relied on a distinct structure of the tables to distinguish prior art in its prosecution of the patent.

⁷ Several subsequent Federal Circuit decisions have distinguished *Becton* on similar grounds. See, e.g. *Powell v. Home Depot U.S.A., Inc.*, 663 F.3d 1221, 1230 (Fed. Cir. 2011); *Retractable Techs., Inc. v. Becton, Dickinson & Co.*, 653 F.3d 1296, 1303 (Fed. Cir. 2011); *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1310 (Fed. Cir. 2005), *abrogated on other grounds by IRIS Corp. v. Japan Airlines Corp.*, 769 F.3d 1359 (Fed. Cir. 2014).

In sum, the court has considered Apple's claim construction arguments, but ultimately rejects them and concludes that while the "prediction table" and "synchronization table" are distinct elements of the patented invention, they may be located in the same structure and may share data and circuitry. Accordingly, WARF's motion is GRANTED.

M. MIL 13: exclude evidence and argument of WARF's expert Conte's involvement in a failed start-up and sale of patents (dkt. #336)

WARF moves to exclude evidence or argument concerning WARF's infringement expert Professor Thomas Conte's business endeavors under Rules 402 and 403. In particular, WARF seeks to exclude evidence that: (1) Conte sold patents on which he was a named inventor to Intellectual Ventures -- a well-known "patent troll," *see* Wikipedia, "Intellectual Ventures," https://en.wikipedia.org/wiki/Intellectual_Ventures (last visited Sept. 14, 2015); and (2) a start-up in which Conte was involved that failed.

In response, Apple contends that Conte's involvement with Billions of Operations Per Second ("BOPS") and his patents are relevant to this case because Conte points to this work experience and his patents as proof of his expertise in the relevant technology. (Def.'s Opp'n (dkt. #410) 2.) Specifically, Apple argues that Conte's experience with BOPS, "including whether the products he worked on were ultimately successful in the marketplace, is relevant to the weight that should be accorded his opinions." (*Id.*) The court agrees with Apple that to the extent *Conte* opens the door by relying on his experience with BOPS to bolster his opinions relating to damages, Apple may cross-examine him as to his involvement with and the commercial success of BOPS products.

As for Conte's sale of patents and whether those patents cover the technology at issue in this case, the court also agrees with Apple that it may question Conte as to the subject matter of the inventions and the sale of the patents to the extent that he opens that door, but any probative value from evidence that he sold the patents to Intellectual Ventures is outweighed by the possibility of jury confusion and unfair prejudice.

Accordingly, WARF's motion is GRANTED IN PART AND DENIED IN PART. If Conte opens the door, Apple may introduce evidence or elicit testimony as to Conte's experience with BOPS, including within reason its commercial success, and may question Conte about the sale of certain patents. Apple is precluded from introducing evidence or arguing that Conte sold his patents to a known patent troll.

N. MIL 14: exclude evidence and argument regarding infringement that is contrary to well-established law (dkt. #341)

In this motion, WARF seeks to preclude Apple from offering evidence and making arguments that would be "contrary to well-established law." WARF contends that Apple intends to argue that: (1) Apple is not liable for direct infringement because it had no knowledge of the '752 patent prior to this lawsuit and did not intend to infringe; (2) Apple's processors do not infringe because they include additional, unrecited elements; and (3) Apple's processors are non-infringing devices because they can operate in a non-infringing manner for periods of time. In response, Apple denies that it intends to make any such arguments, and indeed WARF's citations to Apple's expert reports do not support WARF's contentions. Instead, WARF's brief is largely an attempt to refute the analysis of Apple's experts regarding the elements and operation of the LSD Predictor

found in the accused products. Such arguments would be more appropriately made by WARF's own experts or on cross-examination, not in a motion to preclude Apple from making legally unfounded arguments, which at best is unnecessary. Accordingly, the motion is DENIED as moot.

Perhaps it is worth commenting further to the extent WARF's motion sought to preclude Apple from introducing any evidence and argument regarding: (1) Apple's lack of knowledge of the '752 patent or intent to infringe; (2) elements of Apple's processors that are not covered by the '752 patent; or (3) operations of Apple's processors that are non-infringing. Such evidence may, of course, be relevant to numerous issues remaining to be resolved in this case, including WARF's claims of induced infringement, contributory infringement, willfulness, and its request for pre-suit damages. *See Global-Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. 754, 131 S. Ct. 2060, 2068 (2011) (knowledge required to prove contributory and induced infringement); *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (knowledge relevant to willfulness analysis); 35 U.S.C. § 287(a) (pre-suit notice of alleged infringement relevant to start of damages period). The court does not opine as to relevance generally with respect to ruling on this motion.

Accordingly, Apple may introduce evidence to make permissible arguments, including, but not limited to, the following:

- Apple's alleged lack of knowledge and lack of intent to infringe the '752 patent may be used to support Apple's defenses to WARF's claims of induced infringement, contributory infringement, willfulness, and pre-suit damages; and
- Apple's experts' opinions regarding components, features or functions of the LSD Predictor may be used to describe its general operation, to show that the LSD Predictor does not contain elements or operate in a way that

satisfies the claims of the '752 patent, and to support Apple's argument that certain features of the LSD Predictor not covered by the invention should be apportioned out from any damages claim.

To the extent that WARF believes Apple uses this or other evidence to make improper arguments at trial, WARF is free to make an appropriate objection at the relevant time.

O. MIL to exclude part of testimony of Apple's expert Davis (dkt. #347)

WARF moves to strike portions of Apple's damage expert Julie Davis's testimony under *Daubert*. The admissibility of expert testimony in federal courts is governed principally by Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993).⁸ Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

A district court functions as a "gatekeeper" regarding expert testimony. The court must determine whether a party's proffered expert testimony is relevant and reliable. *Daubert*, 509 U.S. at 589; *see also United States v. Johnsted*, 30 F. Supp. 3d 814, 816 (W.D.

⁸ This standard applies to all of the parties' *Daubert* challenges and will not be repeated.

Wis. 2013) (the expert testimony must be “not only relevant, but reliable.”). Although expert testimony is “liberally admissible under the Federal Rules of Evidence,” *Lyman v. St. Jude Med. S.C., Inc.*, 580 F. Supp. 2d 719, 723 (E.D. Wis. 2008), it must nevertheless satisfy the following three-part test:

- (1) the witness must be qualified “as an expert by knowledge, skill, experience, training, or education,” Fed. R. Evid. 702;
- (2) the expert’s reasoning or methodology underlying the testimony must be scientifically reliable, *Daubert*, 509 U.S. at 592-93; and
- (3) the testimony must assist the trier of fact to understand the evidence or to determine a fact in issue. Fed. R. Evid. 702.

Ervin v. Johnson & Johnson, Inc., 492 F.3d 901, 904 (7th Cir. 2007). “Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *Daubert*, 509 U.S. at 596.

WARF argues that the court should exclude portions of Apple’s damages expert’s testimony relating to a reasonable royalty because her testimony suffers from “fundamental flaws” and does not pass muster under *Daubert*. Specifically, WARF takes issue with (1) Davis’s reliance on the 3% rate WARF proposed in the *Intel* litigation, even though WARF applied that rate under the entire market value rule to Intel’s total revenues without apportionment; (2) Davis’s treatment of five Apple patent licenses, with no attempt to connect the royalty paid to the value of the particular patents licensed; (3) Davis’s reliance on the [REDACTED] (described above in Opinion § I.G) to arrive at a royalty rate based on the \$110 million Intel license; and (4)

Davis's use of a non-comparable, non-patent license between Apple and ARM. The court addresses each challenge in turn

First, WARF challenges Davis's use of the 3% royalty rate WARF argued for in the *Intel* case. As WARF explains, in that case, its experts applied the rate to an unapportioned royalty base, i.e., [REDACTED]. Here, however, Davis applies the 3% royalty rate to an apportioned royalty base (i.e., the revenue she estimates is attributable to the claimed invention of the '752 patent, [REDACTED]). WARF contends that this approach of mixing and matching royalty rates and bases is an attempt to "skew the damages horizon for the jury." *Uniloc USA v. Microsoft Corp.*, 632 F.3d 1292, 1320 (Fed. Cir. 2011).

In response, Apple argues that Davis: (1) appropriately relied on the 3% rate; and (2) accounted for the fact that the 3% rate in *Intel* was applied to unapportioned revenues. In support of its argument, Apple primarily relies on *Ericsson, Inc. v. D-Link Systems, Inc.*, 773 F.3d 1201 (Fed. Cir. 2014). In *Ericsson*, the Federal Court considered whether the district court erred in allowing expert testimony on "licenses . . . tied to the entire value of the licensed products, even though the technology being licensed related to only a component of those products." *Id.* at 1225. The Federal Circuit held that the district properly admitted evidence of the licenses because the expert's "testimony explain[ed] to the jury the need to discount reliance on a given license to account only for the value attributed to the licensed technology." *Id.* at 1228.

In so holding, the court explained that there are various ways to "apportion the defendant's profits and the patentee's damages between the patented feature and the

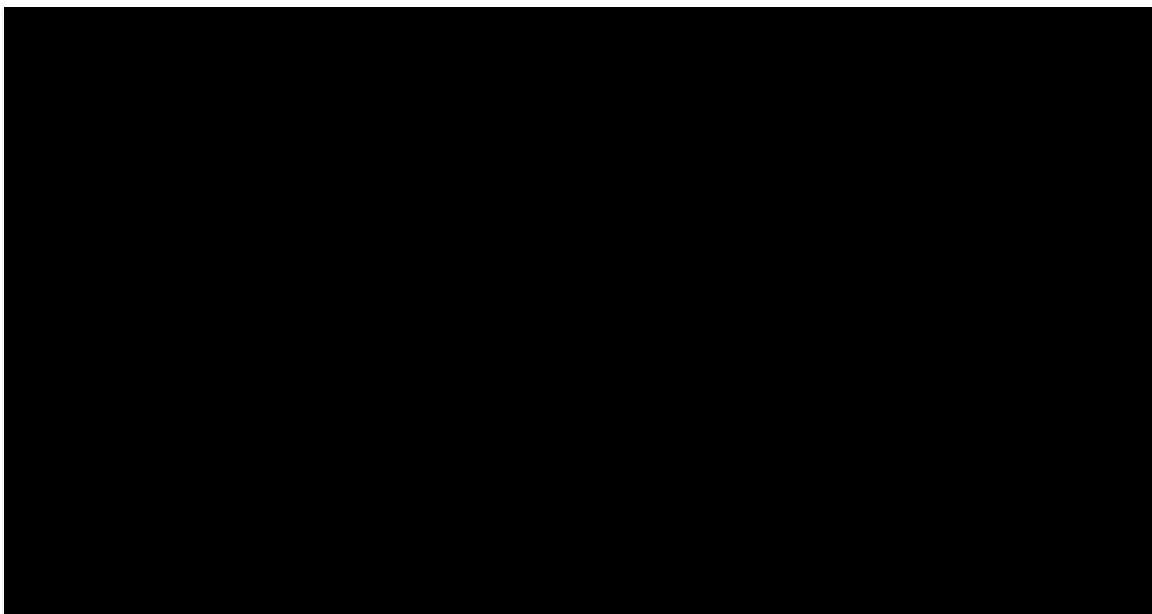
unpatented features,” including “by careful selection of the royalty base to reflect the value added by the patented feature . . . ; by adjustment of the royalty rate so as to discount the value of a product’s non-patented features; or *by a combination thereof*.” *Id.* at 1226 (emphasis added). Here, Apple represents that Davis did both: (1) she looked to the 3% rate in *Intel*, as well as other royalty rates in Apple’s prior license agreements to comparable technology and WARF’s own market analysis (Def.’s Opp’n (dkt. #430) 11-12); and (2) she conducted analysis to apportion the revenue base (*id.* at 14-15).

Critical to WARF’s challenge, Davis explains that the 3% rate was applied to an unapportioned revenue base in the *Intel* case, but then explains why she adopts that same rate on an apportioned revenue base. (*Id.* at 13 (citing Report of Julie Davis (dkt. #190) 82-85); *see* Davis Rept. (dkt. #90) 84 (“The 3% royalty rate that WARF’s expert proposed in the Intel litigation was intended to apply to an unapportioned royalty base. Since WARF’s litigation with Intel, the law has become clear that the royalty rate must be applied to an apportioned royalty base. Still, the evidence is that the 3% rate that WARF argued for in its case against Intel is the highest rate the parties would have agreed to in this matter.”). As such, the court finds that Davis’s approach is not contrary to Federal Circuit law and will reject WARF’s motion to strike her testimony about the 3% royalty rate.

All of that said, WARF’s criticism of Davis’s analysis -- in particular, her effective conclusion that “Apple should get to keep for itself 97% of the fruits of its infringement” (Pl.’s Mot. (dkt. #347) 8-9) -- appears to have much merit, but this criticism goes to the weight the jury should place on her opinion and does not serve as a basis for striking her

testimony. Moreover, to ameliorate against any possible confusion on the part of the jury in Davis's use of the 3% royalty rate proposed by WARF in *Intel*, the court is open to providing a cautionary instruction to the jury before the pertinent testimony "regarding the limited purposes for which such testimony is proffered." *Ericsson*, 773 F.3d at 1228. WARF may propose such an instruction by Friday, October 2, 2015.

Second, WARF takes issue with Davis's approach of converting five lump sum patent license agreements into an effective royalty rate as a percentage of Apple's overall revenues. For two of the five agreements, the licensed products are not identified, so Davis divides Apple's lump sum payment by *all* of Apple's corporate revenues since the effective date of those agreements. For the other three licenses, Davis calculates the royalty rate based on the overall revenues of the Apple products accused of infringement in the litigation settled under the agreements. Davis then calculates a weighted average based on these five agreements of 0.004%:



(Pl.'s Mot. (dkt. #347) 16 (citing Davis Rept. (dkt. #190) 100).)

As Apple points out, Davis does not propose the 0.004% as a reasonable royalty rate, rather she uses it to buttress her claim that a 3% royalty rate is reasonable. The problem, however, with this logic is that the 3% royalty rate she relies on is applied to apportioned revenues (e.g., revenues solely based on the patented feature), whereas Davis's effective royalty rate based on these other patent licenses are derived from unapportioned revenues (e.g., either revenues from all of the licensed products or total Apple revenues). As such, the percentages are necessarily deflated based on the large royalty bases she uses. Moreover, Davis fails to acknowledge this discrepancy in her conclusion, simply stating "In total, considering each of the prior Apple agreements described above, Apple has paid an effective royalty of 0.004% for licenses to technology that I understand to be comparable to the '752 patent." (Davis Rept. (dkt. #190) 100.) In light of the parties' agreement that a royalty rate should be applied to apportioned revenues (even if the parties disagree on the amount of that apportionment), Davis's reference to a royalty rate calculated from unapportioned revenues and her failure to explain the relevance of this in her conclusion renders it unreliable. In other words, here, Davis failed to provide the necessary explanation required by the Federal Circuit in *Ericsson*, 773 F.3d at 1228. Accordingly, the court will strike that portion of her report analyzing Apple's five lump sum patent license agreements and preclude her from testifying on that topic unless WARF should open the door.

Third, WARF takes issue with Davis's method of converting WARF's *Intel* lump sum settlement into a [REDACTED] per unit royalty. WARF argues that it is Davis's intent to "mislead" the jury into believing that the \$110 million lump sum agreement with *Intel*

was a running royalty, relying on her repeated statement that “[i]t is reasonable to use the per unit royalty that the licensor has agreed to in the past to determine an appropriate royalty.” (Pl.’s Mot. (dkt. #347) 21 (quoting Davis Rept. (dkt. #190) 106).) In her report, however, Davis *does* explain that the license agreement in *Intel* was in the form of a lump sum payment and then describes how she calculated an effective royalty rate from Intel’s subsequent sales data. (Davis Rept. (dkt. #190) 107.) There is nothing misleading about this testimony, although certainly room to cross examine or argue as to the relevance of such post-negotiation sales to the lump sum agreed upon by WARF and Intel.

More to the point, WARF also challenges Davis’s method of calculating the royalty payment, in particular her reliance on the [REDACTED] provided by Intel’s employee David Papworth. For the reasons explained above, *see* Opinion § I.H, the court rejected WARF’s motion to exclude Intel’s data regarding a possible royalty base. WARF, of course, is free to question Davis on her use of the royalty base, including the fact that it includes worldwide sales (premised on Apple’s position that the license is for worldwide sales), among other criticisms. None of WARF’s challenges with respect to Davis’s calculation of a per unit royalty, however, justifies striking this portion of her testimony.

Fourth, and finally, WARF contends that the court should exclude Davis’s [REDACTED]. In the challenged portion of her report, [REDACTED]. This license covers certain technology and is not a patent license. Davis relies on the per unit

payment under the agreement as one way to calculate damages in this case. (Davis Rept. (dkt. #190) 112-114.) WARF takes issue with the fact that the license is not a patent license, and from this argues that it is not comparable. In response, Apple points out that Davis acknowledges in her report that this is a technical agreement, as well as the significance of that fact compared to a patent license. (Def.'s Opp'n (dkt. #430) 24 (citing Davis Rept. (dkt. #190) 111-113).) WARF's concerns about her reliance on this agreement certainly goes to the weight the jury may give her testimony, but does not serve as a basis for striking it. *See, e.g., Ultratec, Inc. v. Sorenson Comm'ns, Inc.*, No. 13-cv-346-bbc, 2014 WL 5080411 at *3 (W.D. Wis. Oct. 9, 2014) (reliance on a non-patent license is not a basis for striking so long as expert explains the difference between a technical agreement and a patent agreement).

Accordingly, WARF's motion is GRANTED with respect to Davis's reliance on the five lump sum patent Apple agreements, but DENIED in all other respects.

P. MIL to exclude testimony and video of Apple's expert Hitt comparing speed of iPhone 5s and iPhone 5c (dkt. #348)

WARF also moves to preclude one of Apple's experts on damages, Dr. Hitt, from describing a demonstration he conducted to assess the relative speed of the iPhone 5s compared to the iPhone 5c. In his report, Dr. Hitt says he purchased two off-the-shelf versions of these phones and then videotaped himself simultaneously running a series of apps and tasks on the phones. He performed the tests to "determine whether there was any noticeable or meaningful speed difference in the operation of the iPhone with the accused functionality – the iPhone 5s – and the iPhone without the accused feature – the

iPhone 5c.” (Hitt Rept. (dkt. #273) ¶ 93.) “As can be seen from the demonstration,” Hitt concludes there is little to no difference in the speed or performance of the two iPhones.” (*Id.* at ¶ 94.)

WARF argues that Dr. Hitt’s testimony describing his “demonstration,” as well as the conclusions he drew from it, should be precluded under *Daubert* and Fed. R. Evid. 403, calling the test unscientific, unreliable, confusing and prejudicial to WARF. In particular, WARF criticizes Dr. Hitt for cherry-picking apps that require little processing capacity and failing to validate or test his conclusions. WARF also argues that Dr. Hitt is not qualified to test relative processor speeds and that his purported demonstration does not support his sweeping conclusions about the difference in the speed or performance of the two iPhones.

The court agrees with WARF that Apple has not shown Dr. Hitt to be qualified to design or perform tests to determine whether “there is little to no difference in the speed or performance of the two iPhones.” Dr. Hitt is a Professor at the University of Pennsylvania’s Wharton School of Business and has experience in the subjects of pricing in the electronics industry, consumer behavior, and consumer demand. Although he has a bachelor’s degree in electrical engineering, he is not acting as a technical expert in this case; rather, he is testifying as an expert on valuation and consumer demand. Additionally, Apple has also not shown that Dr. Hitt’s test is the type of test that would normally be relied on by an economics expert conducting a valuation analysis. Indeed, it would be hard to believe that a valuation expert would rely on his own, one-time

observation of two devices to draw broad conclusions about valuation and consumer behavior.

To its credit, Apple concedes that Dr. Hitt’s “demonstration” was not intended to be a scientific test, but was merely intended as a visual to illustrate something which the jury could determine itself. (Def.’s Opp’n (dkt. #415) 7 (“Dr. Hitt, and indeed the jury, is qualified to make the relative speed comparison shown in his video demonstration.”).) Apple argues that the Dr. Hitt should be permitted to introduce the test as relevant “demonstrative evidence” of the speed and performance of the phones.

Apple’s arguments are ultimately unpersuasive. “Demonstrative evidence” is evidence used to explain or illustrate testimony (or other evidence) that is already in the record. *See* 22 Charles Alan Wright & Kenneth W. Graham, Jr., *Fed. Prac. & Proc.* § 5172 (2d ed. 2012). But Dr. Hitt’s test is not attempting to illustrate or explain other evidence or testimony in the record. Rather, Dr. Hitt describes his test as “additional evidence that the accused functionality is not the basis for customer demand for the accused products.” (Hitt Rept. (dkt. #273) ¶ 92.) He then relies on the results of the test itself to conclude that “there is little to no difference in the speed or performance” of the two iPhones. (*Id.* at ¶ 94.)

Moreover, if Dr. Hitt’s conclusions based on his test did not require scientific or technical expertise, as Apple appears to concede, but were simply conclusions that any lay person could reach after performing the same tests, it would be confusing and prejudicial to allow the test to come in cloaked as expert analysis. Under Rule 703, expert testimony is admissible if it would assist the jury in interpreting scientific or

technical matters. While the court considered allowing this “demonstration” to help illustrate Hitt’s thought process, given the crucial nature of speed as an issue, the court concludes it would be inappropriate to permit an expert to provide a demonstration outside his expertise by “cherry picking” certain functions that might be misconstrued by the jury as being scientific evidence relevant to the expert’s ultimate conclusion. Accordingly, WARF’s motion is GRANTED.

Q. MIL to exclude testimony of Apple’s experts Donaldson, Colwell and Davis on comparable licenses (dkt. #351)

In this motion *in limine*, WARF seeks to exclude testimony of three of Apple’s experts concerning five Apple license agreements. The court has already granted WARF’s request to strike Julie Davis’s testimony on these five agreements based on her failure to adequately connect the royalty rate derived from these five agreements calculated on an unapportioned revenue based to the royalty rate she proposes in this case which would be applied to an apportioned revenue base. (*See* Opinion § I.O.) In her report, Davis relied on Richard Donaldson’s opinion that these five agreements are comparable, and Donaldson, in turn, relied on technical expert Robert Colwell’s opinion that the five agreements relate to technology comparable to that disclosed in the ’752 patent. (Pl.’s Mot. (dkt. #351) 6, 8.) In light of the court’s decision to strike Davis’s use of specific royalty rates for these five agreements, the relevance of Davis, Donaldson and Colwell’s respective testimony appears to be limited. That said, Apple argued at the final pretrial conference that the fact of other comparable licenses is relevant under *Georgia-Pacific*, and therefore the court will not exclude Davis, Donaldson and Colwell’s testimony on the

fact of comparable licenses while excluding the specific calculated royalty rates themselves. (*See* 9/25/15 Hr'g Tr. (dkt. #462) 48.) WARF's remaining challenges go to the weight, not admissibility. According, this motion is GRANTED IN PART with respect to Davis's use of specific royalty rates for these five agreements (Opinion § I.O), but DENIED IN ALL OTHER RESPECTS.

ORDER

IT IS ORDERED that:

1. Plaintiff's motion *in limine* 1 (dkt. #289) is GRANTED IN PART AND DENIED IN PART.
2. Plaintiff's motion *in limine* 2 (dkt. #290) is GRANTED IN PART, DENIED IN PART AND RESERVED IN PART. As described in greater detail above, Apple's proffer is due on or before September 29, 2015, with any response by WARF due October 1, 2015.
3. Plaintiff's motion to file a reply brief in support of its motion in *limine* 2 (dkt. #448) is GRANTED.
4. Plaintiff's motion *in limine* 3 (dkt. #291) is GRANTED IN PART AND DENIED IN PART.
5. Plaintiff's motion *in limine* 4 (dkt. #292) is GRANTED.
6. Plaintiff's motion *in limine* 5 (dkt. #293) is GRANTED IN PART AND DENIED IN PART.
7. Plaintiff's motion *in limine* 6 (dkt. #294) is GRANTED IN PART AND DENIED IN PART.
8. Plaintiff's motion *in limine* 7 (dkt. #295) is GRANTED.
9. Plaintiff's motion *in limine* 8 (dkt. #330) is DENIED.
10. Plaintiff's motion *in limine* 9 (dkt. #332) is DENIED.
11. Plaintiff's motion *in limine* 10 (dkt. #333) is GRANTED.

12. Plaintiff's motion *in limine* 11 (dkt. #342) is GRANTED IN PART AND DENIED IN PART.
13. Plaintiff's motion *in limine* 12 (dkt. #335) is GRANTED.
14. Plaintiff's motion *in limine* 13 (dkt. #336) is GRANTED IN PART AND DENIED IN PART.
15. Plaintiff's motion *in limine* 14 (dkt. #341) is DENIED as moot.
16. Plaintiff's *Daubert* motion to exclude in part the testimony of defendant Apple's damages expert Julie Davis (dkt. #347) is GRANTED IN PART AND DENIED IN PART. WARF's submission of a curative instructions -- as explained above -- is due on or before Friday, October 2, 2015.
17. Plaintiff's *Daubert* motion pursuant to Fed. R. Evid. 702 and 403 to exclude Apple expert Lorin Hitt's testimony and video purportedly comparing the speed of the iPhone 5s and iPhone 5c (dkt. #348) is GRANTED.
18. Plaintiff's *Daubert* motion to exclude in part the testimony of apple's experts Richard Donaldson, Robert Colwell and Julie Davis on allegedly comparable licenses (dkt. #351) is GRANTED IN PART AND DENIED IN PART.

Entered this 28th day of September, 2015.

BY THE COURT:

/s/

WILLIAM M. CONLEY
District Judge